

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1 to 3. (Canceled).

4. (Currently Amended) A supported catalyst suitable for use as a cathode of direct methanol fuel cells, comprising:

an electroconductive, porous carrier having micropores; and
catalyst particles positioned in the pores of the carrier comprising an alloy selected from the group consisting of Cd and Au; ~~Cd and Ag~~; Cd and Cu; Cd and Ni; and Cd and Pt; wherein the alloy has a stronger oxygen-binding force than platinum or a weaker hydrogen-binding force than platinum.

5 to 12. (Canceled).

13. (Previously Presented) The supported catalyst according to claim 4, wherein the alloy has a stronger oxygen-binding force than platinum and a weaker hydrogen-binding force than platinum.

14. (Canceled).

15. (Previously Presented) The supported catalyst according to claim 4, wherein the porous carrier is graphite, mesoporous carbon powder or carbon nano tube.

16. (Previously Presented) A direct methanol fuel cell comprising:
a cathode;
an anode; and

an electrolyte membrane being placed between the cathode and the anode, wherein the cathode comprises the supported catalyst which comprises an electroconductive, porous carrier having micropores; and catalyst particles positioned in the pores of the carrier comprising an alloy selected from the group consisting of Cd and Au; Cd and Ag; Cd and Cu; Cd and Ni; and Cd and Pt; wherein the alloy has a stronger oxygen-binding force than platinum or a weaker hydrogen-binding force than platinum.

17. (Previously Presented) The direct methanol fuel cell according to claim 16, wherein the alloy has a stronger oxygen-binding force than platinum and a weaker hydrogen-binding force than platinum.

18 to 21. (Canceled).

22. (Previously Presented) The supported catalyst according to claim 4, wherein the oxygen-binding energy is at least 4.5 eV and/or the hydrogen-binding energy is at most 2.5 eV.

23. (Currently Amended) The supported catalyst according to claim 4, wherein the alloy comprises three or more metals, wherein the alloy further comprises Co, Ni, Rh, Pt, Cu, Ag, Au, [[Zn]] and/or Cd.

24. (Previously Presented) The direct methanol fuel cell according to claim 16, wherein the oxygen-binding energy is at least 4.5 eV and/or the hydrogen-binding energy is at most 2.5 eV.

25. (Previously Presented) The direct methanol fuel cell according to claim 16, wherein the alloy comprises three or more metals, wherein the alloy further comprises Co, Ni, Rh, Pt, Cu, Ag, Au, Zn and/or Cd.

26 to 27. (Canceled).

28. (Previously Presented) A direct methanol fuel cell comprising:
a cathode;
an anode; and
an electrolyte membrane being placed between the cathode and the anode,
wherein the cathode comprises the supported catalyst which comprises an
electroconductive, porous carrier having micropores selected from the group
consisting of graphite, mesoporous carbon powder, and carbon nano tube; and
catalyst particles positioned in the pores of the carrier comprising an alloy selected
from the group consist of Cd and Au; Cd and Ag; Cd and Cu; Cd and Ni; Cd and Pt;
wherein the alloy has a stronger oxygen-binding force than platinum or a weaker
hydrogen-binding force than platinum.

29. (Previously Presented) The direct methanol fuel cell according to claim
28, wherein the alloy has a stronger oxygen-binding force than platinum and a
weaker hydrogen-binding force than platinum.

30. (Previously Presented) The direct methanol fuel cell according to claim
28, wherein the oxygen-binding energy is at least 4.5 eV and/or the hydrogen-
binding energy is at most 2.5 eV.

31. (Previously Presented) The direct methanol fuel cell according to claim
28, wherein the alloy comprises three or more metals, wherein the alloy further
comprises Co, Ni, Rh, Pt, Cu, Ag, Au, Zn and/or Cd.